

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A reflectron (109) for use in a mass spectrometer comprising:

a plurality of reflectron electrodes (123a-123n) connectable to one or more high voltage power supplies (127) wherein means for changing the electrical potentials of at least some of said reflectron electrodes (123a-123n) is provided in order to change the shape of the electrical field inside said reflectron (109); and at least two sets of field resistances (131a-131n, 137a-137n) which can be connected one set at a time, or in parallel, or in series, between the reflectron electrodes (123a-123n).

Claim 2 (cancelled)

Claim 3 (currently amended): The reflectron of claim 1-2, wherein one of said sets of field resistances includes field resistances (131a-131n) arranged to produce a linear electrical field inside said reflectron (109).

Claim 4 (currently amended): The reflectron of claim 1-2, wherein one of said sets of field resistances includes field resistances (137a-137n) arranged to produce an essentially quadratic electrical field inside said reflectron (109).

Claim 5 (currently amended): The reflectron of claim 1-2, wherein at least one of said sets of different resistances includes fewer resistances than there are reflectron electrodes.

Claim 6 (currently amended): The reflectron of claim 1, wherein the at least one set two sets of field resistances (131a-131n; 137a-137n) is mounted on a movable rod (133; 139), wherein said rod (133; 139) is movable between a first position where said set of field resistances (131a-131n; 137a-137n) are in electrical contact with said reflectron electrodes (123a-123n) and a second position where said set of field resistances (131a-131n; 137a-137n) is not in contact with said reflectron electrodes (123a-123n).